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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/933,169	08/21/2001	Larry A. Druga	114302.1721	6443		
30734	7590 02/19/2004		EXAMINER			
	IOSTETLER LLP	CECIL, TERRY K				
WASHINGTON SQUARE, SUITE 1100 1050 CONNECTICUT AVE. N.W. WASHINGTON, DC 20036-5304			ART UNIT	PAPER NUMBER		
			1723			

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

• · · · ·	•	Application No	•	Applicant(s)	VIV			
		09/933,169		DRUGA, LARRY A.				
Office Action Summary		Examiner		Art Unit				
		Mr. Terry K. Ce	cil	1723				
	The MAILING DATE of this communication	appears on the cove	er sheet with the co	orrespondence a	ddress			
Period fo			OIDE AMONTUS	N EDOM				
THE I - Exter after - If the - If NC - Failu - Any	ORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, and period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by streply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no event, how a reply within the statutory meriod will apply and will expire tatute, cause the application	wever, may a reply be time inimum of thirty (30) days e SIX (6) MONTHS from to to become ABANDONED	ely filed will be considered time ne mailing date of this (35 U.S.C. § 133).	ely. communication.			
Status								
1)[Responsive to communication(s) filed on		<i>r</i>					
2a)⊠ —	,—	This action is non-		Post and the A	t i .			
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims	,	,					
4)⊠	Claim(s) 2-14 and 16-21 is/are pending in	the application.						
	4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>2-12 and 16-21</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)[Claim(s) are subject to restriction as	nd/or election requir	ement.					
• •	ion Papers							
,	The specification is objected to by the Exar		to the the Tree					
10)	The drawing(s) filed on is/are: a) a				,			
44)[]	Applicant may not request that any objection The proposed drawing correction filed on _							
11)				ved by the Exami	1101.			
If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner.								
, —	under 35 U.S.C. §§ 119 and 120	5 1						
_	Acknowledgment is made of a claim for fo	reian priority under	35 U.S.C. § 119(a)-(d) or (f).				
•	☐ All b)☐ Some * c)☐ None of:	, o.g., p	5 (, ()				
ω,	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
*	3. Copies of the certified copies of the application from the International See the attached detailed Office action for a	priority documents al Bureau (PCT Rule	have been receive e 17.2(a)).	ed in this Nationa	al Stage			
	See the attached detailed Office action for a Acknowledgment is made of a claim for don				al application).			
•	a) The translation of the foreign language				о оррания,			
15)	Acknowledgment is made of a claim for dor							
Attachme		., г	Interview Commen	/ (DTO 442) Dance N	vlo(s)			
2) 🔲 Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948 rmation Disclosure Statement(s) (PTO-1449) Paper No		= '	(PTO-413) Paper Natent Application (F				

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DETAILED ACTION

Claim Rejections - 35 USC § 112

Because of applicant's amendment to claim 21, the 112 rejection of the prior office action has been withdrawn.

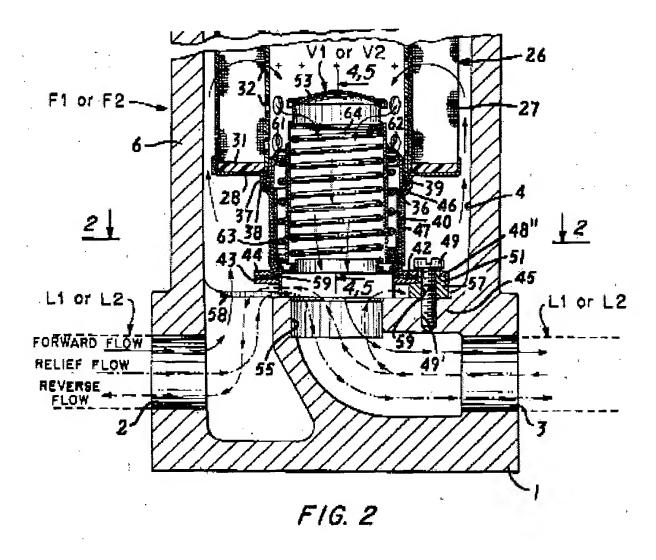
Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 2. Claims 3-4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (U.S. 3,996,137), in view of McDuffie (U.S. 3,799,347) and Gizowski (U.S. 6,139,737). Cooper discloses a fluid filter that teaches the valve configuration of claims 3 and 4. The bottom of figure 2 thereof is reproduced on the next page.

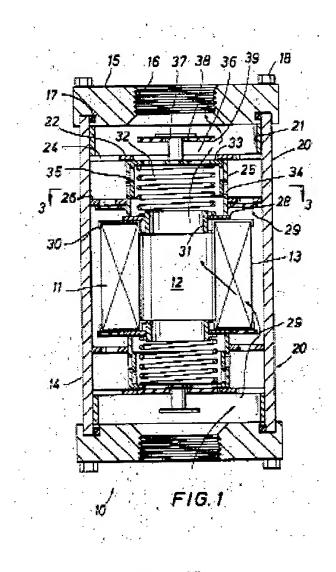
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The first, second, third fluid flows and the arrows thereof are shown above as the forward flow, relief flow, and reverse flow, respectively [as in claim 3], wherein the first flow path includes the inlet 2, the space between the filter element 27 and the housing 6, the filter element, a central passage 35, and the outlet 3 [as in claim 4]. Cooper does not teach the inlet, outlet, and filter to be in a coaxial arrangement. However, such is shown in the art of McDuffie (see figure 1) [as in claim 3]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inlet and outlet (2,3) of Cooper to be in the coaxial arrangement of McDuffie, since McDuffie also teaches a filter/valve configuration wherein the inlet and outlet can be reversed. The modification would allow the invention of Cooper to be used in hydraulic systems where a symmetric configuration is required (e.g. systems disclosed in col. 1, lines 11-15 of McDuffie). It is also pointed out that Cooper teaches other arrangements

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(other than those shown) are possible. See col. 9, lines 20-25. Upon modification the combination would have the ability to function even if the filter was installed in reverse.



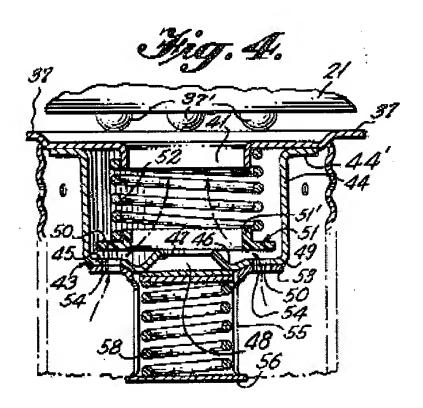
McDuffie

Gizowski teaches respective barbs for the inlet and outlet of a filter [as in claim 3]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inlet and outlet barbs of Gizowski in the invention of Cooper, as modified by McDuffie, since Gizowski teaches the benefit of a connecting means suitable for connecting a transmission filter a vehicle system.

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Claim 10 has the limitation of a magnet positioned around a side wall of an interior face of the chamber, which attracts and retains magnetically susceptible particles in the fluid. Gizowski teaches such a magnet: 18 of figure 2. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the magnetic of Gizowski in the filter of Cooper, as modified by McDuffie, since Gizowski teaches the benefit of removing metal particles that may damage mechanical components of a vehicle (col. 1). Such a benefit is also desired by Cooper (col. 1, lines 55-62). Since fluid in both prior art references flows between the housing and the filter element before being filtered, such a structural modification is possible.

3. Claims 2-9, 11-12 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humbert (U.S. 3,456,800) in view of McDuffie and Gizowski. Figure 4 of Humbert has been reproduced below.



As shown above, Humbert discloses a first retainer 44 (or alternately 37 and attached wall 34), a first spring, a first disk 51, a second retainer 55, a second spring, and a second disk 57 (see figure

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2), wherein the disks are operative to compress in opposite directions toward their respective retainers. In addition, as shown in figure 1, Humbert teaches the aforementioned dual direction bypass valve in combination with a filter 33 having an inlet and an outlet (12 or 13) and an end cap separating the first and second disks (bottom portion 45 can be viewed an end cap [as in claim 21] between disks 51 and 57 and the retainer—37 and attached wall 34) [as in claim 2].

Humbert also discloses a first fluid flow path (shown in figure 1), a second fluid flow path allowing a forward flow bypass means (shown in figure 2); and a third fluid flow path allowing a reverse flow bypass means (shown in figure 4) wherein the reverse flow bypass means is disposed adjacent the forward flow bypass means [as in claim 3].

As shown in figure 1, in the first fluid flow path, fluid entering inlet 12 flows through apertures 32 in the first retainer (37 with attached wall 34) into a space between the filter element 33 and wall 34 (which is also between the filter media and an interior face of a central wall of the chamber), through the filter media 33 into a central passage and out the outlet 13 [as in claims 4 and 5], wherein the spring 30 is considered a stabilizing spring that is disposed between the first retainer and the housing which results in holding the first retainer in place [as in claim 11].

As shown in figure 4, Humbert also discloses the reverse flow bypass means to include a first disk 51 against a plurality of peripheral holes 50 in the end cap 45 operable to open toward the first retainer means (37) for fluid to bypass the media [as in claim 6].

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As shown in figure 2, Humbert also discloses the forward bypass means to include a second disk 57 against a central opening 48 in the end cap 45 operable to open toward the second retainer means 55 to bypass the filter media [as in claim 7], wherein the forward flow bypass means (the second fluid flow path) leads through the front valve body (that includes 44) and through the rear valve body (that includes 55) to the outlet 13 [as in claim 8] and the reverse bypass means (third flow path) leads from outlet 13 through the central passage, front valve body (via holes 50) to bypass the rear valve body (including 55) and the media [as in claim 9].

Humbert does not teach the inlet, outlet and filter being in a coaxial arrangement. However, such is shown in the art of McDuffie (see figure 1) [as in claims 2, 3 and 12]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inlet and outlet (2,3) of Humbert to be in the coaxial arrangement of McDuffie, since McDuffie also teaches a filter/valve configuration wherein the inlet and outlet can be reversed. The modification would allow the invention of Humbert to be used in hydraulic systems where a symmetric configuration is required (e.g. systems disclosed in col. 1, lines 11-15 of McDuffie). It is also pointed out that the outlet of Humbert being in the opposite end of the housing would considerably shorten the outlet flow passage, providing the additional benefit of less pressure necessary for filtering—resulting in an energy savings. It is also pointed out that Humbert teaches his invention is only limited by the claims and not in any way limited by the structure in the specification—claim 1 of Humbert does not limit his housing structure have outlet and inlet ports at opposite ends and the filter element coaxially arranged therebetween. Upon

modification the combination would have the ability to function even if the filter was installed in reverse.

Gizowski teaches respective barbs for the inlet and outlet of a filter [as in claims 2, 3 and 12]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inlet and outlet barbs of Gizowski in the invention of Cooper, as modified by McDuffie, since Gizowski teaches the benefit of a connecting means suitable for connecting a transmission filter a vehicle system.

As for the additional limitations of claims 12 and 15-18, Humbert, in view of McDuffie, as expanded above, teaches all the limitations thereof.

As for claims 19 and 20, the drawing symbol for disk 51 (alternating diagonal thin and thick lines) indicates the disk is made of plastic [as in claim 19] and the drawing symbol for the retainer, spring and end cap (diagonal thin lines) indicates the elements are made of metal. See MPEP 608.02.

Response to Arguments

Applicant's arguments filed 1-2-2004 have been fully considered but are moot in view of 4. new ground of rejection necessitated by amendment. Gizowski, already of record, teaches applicants new limitations of barbs at the inlet and outlet of the filter. As for the limitation of the filter being functionable if the inlet and outlet is reversed, it is contended that the combinations

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of references presented above would teach such a configuration. Note, e.g. that the filter of McDuffie works without regard to the direction of fluid flow, see col. 1, lines 20-25 thereof.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mr. Terry K. Cecil Primary Examiner Art Unit 1723

TKC February 15, 2004